

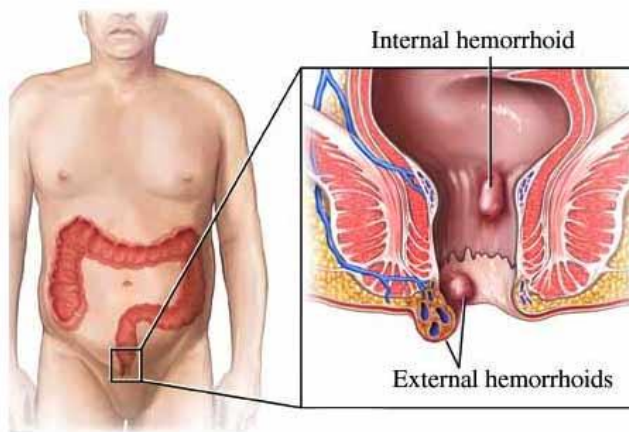
Hemorrhoids

Hemorrhoids: dilated sub-mucosal vascular tissue (varicosities) of the rectal venous plexus.

Internal hemorrhoids: above the dentate line (i.e., the junction between columnar and squamous epithelium) and are viscerally innervated so generally painless unless strangulated).

--Classification: 1st degree (no protrusion, diagnosed with anoscopy); 2nd degree (protrudes with straining but reduces spontaneously); 3rd degree (protrudes but requires manual reduction); 4th degree (prolapsed and irreducible).

External hemorrhoids: below the dentate line and have somatic innervations and are typically painful.



1. Epidemiology and Risk factors:

-Estimates of 4 percent of adults (may be underestimation). Most prevalent between 45 and 65 years of age.

-Risk factors: any process that increases intra-abdominal pressure (e.g. straining, constipation, pregnancy, ascites, obesity)

2. Symptoms: rectal itching or pain, rectal bleeding (hemorrhoidal bleeding typically is bright red blood on toilet paper when wiping or few drops into the toilet bowl), constipation, lump or protrusion at the anus.

3. Diagnosis:

-DDx: skin tag, anal fissure or fistula, anal condylomata, infection (cellulitis, perirectal abscess, fungal, herpetic...), inflammatory bowel disease, malignancy (colorectal or anal)

-Diagnosis:

--Visual external inspection, digital rectal examination (DRE), anoscopy, and endoscopy if indicated.

--Recommendation for endoscopy: if history or examination is concerning for possible IBD or cancer (especially in patient's that are over the age of 40 with a positive FOB, iron deficiency anemia and who have not had colon cancer screening OR patient's with red flag symptoms- change in bowel habits, unintentional weight loss, blood in stool or melena, significant family history).

4. Treatment:

- Lifestyle changes (all types): avoidance of prolonged straining, increase intake of water and fiber (especially with fiber supplementation), stool softeners, and increase exercise.

- Sitz baths (all types)

- Topical preparations (typically for non-thrombosed external hemorrhoids, 1st and 2nd degree internal hemorrhoids)

 - Topical analgesics (witch hazel- as in some Tucks products, dibucaine ointment, lidocaine jelly), topical corticosteroids (cream, ointment, suppositories) or topical vasoconstrictors (i.e. topical nitroglycerin or nifedipine, topical phenylephrine- as in some Preparation H products)

- Thrombosed External Hemorrhoids: Usually if large or failed conservative management. Excision of hemorrhoid found to recur less than if just evacuation of clot (can be an out-patient procedure).

 - Anesthetize with lidocaine with epinephrine, make an elliptical incision around lateral edges of hemorrhoid and remove. Either leave wound open to close secondarily or close with sutures. (See AAFP article for procedure details)

- Internal Hemorrhoids (generally for 3rd and 4th degree; or painful, difficult to treat 1st or 2nd degrees that fail above therapies):

 - Excisional hemorrhoidectomy (typically done in hospital setting) or Stapled hemorrhoidectomy (typically done in hospital setting)

 - Rubber band ligation (can be performed in an out-patient setting under anoscopy)

 - Sclerotherapy or Infrared coagulation (less successful but can be performed by skilled practitioner in an out-patient setting; neither are highly successful in preventing recurrence)

Mounsey, A.L., Halladay, J., Sadiq, T.S. Hemorrhoids. Am Fam Physician. 2011 Jul 15;84(2):204-210.

Zuber, T.J. Hemorrhoidectomy for Thrombosed External Hemorrhoids. Am Fam Physician. 2002 Apr 15;65(8):1629-1632.

Up-To-Date Topics: Overview of hemorrhoids and Treatment of hemorrhoids

American Gastroenterological Association Medical Position Statement: Diagnosis and Treatment of Hemorrhoids. Gastroenterology.126:1461–1462